

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-08-23  
**Investment Auto Submission Date:** 2012-02-28  
**Date of Last Investment Detail Update:** 2012-02-24  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX013: Aviation Surface Weather Observation Network (ASWON)

**2. Unique Investment Identifier (Ull):** 021-432721618

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Aviation Surface Weather Observation Network (ASWON) program is a collection of weather equipment that supports the FAA and National Weather Service (NWS) modernization by automating surface weather observations. ASWON consists of 8 projects: Automated Surface Observing System (ASOS), ASOS Pre-Planned Product Improvement (ASOS P3I), Automated Weather Observing System (AWOS), Automated Weather Sensor System (AWSS), Stand-Alone Weather Sensors (SAWS), ASOS/AWOS Data Acquisition System (ADAS), Model F420 anemometer (F420), and Digital Altimeter Setting Indicator (DASI). However, this summary will specifically address only the one active project, ASOS P3I. The remaining 7 projects are legacy systems and are now fully operational. ASWON's role is to provide real time, accurate surface weather conditions to pilots, air traffic controllers, other aviation users, and the national weather data network. The FAA share of ASWON weather systems provides weather information at approximately 800 facilities. The ASOS P3I has completed the first 3 upgrades. The ceilometer upgrade procurement has been completed and deployment is currently underway. The last ASOS P3I upgrade, the enhanced precipitation indicator (EPI) sensor, is in the development stage at NWS. NWS has had multiple issues and multi-year delays in identifying and procuring a new EPI sensor; therefore, the EPI effort has been removed from the FAA ASWON baseline. In FY12, the ASOS P3I project will complete deployment of the remaining ceilometers. The DME portion of the

program is expected to be completed in 2012. In FY13 the ASWON program will continue monitoring the performance of program activities and goals.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The Aviation Surface Weather Observation Network (ASWON) provides cost reduction benefits to the Federal Aviation Administration (FAA) and the National Weather Service (NWS) by automating surface weather observations. ASWON meets the needs of pilots, operators and air traffic personnel without high-cost, labor-intensive, manual surface weather observations. ASWON supports the NAS reliability goal of 99.7%: 1) The automated weather equipment is a cost-beneficial alternative to human weather observers (HWO). The 20 year cost of an automated system is \$900K versus \$3M for HWOs. 2) ASOS and AWSS provide wind speed and direction, altimeter; visibility, cloud height, precipitation identification, temperature, and dew point. ASOS P3I project consists of 5 upgrades to the ASOS; main processor, dewpoint sensor, ice-free wind sensor, ceilometer, and enhanced precipitation identification (EPI) sensor. 3) SAWS provides secondary source of temperature, dewpoint, altimeter, wind speed, direction and gusts at service level C facilities. The cost benefits for ASWON include passenger value of time, aircraft operating direct costs, and safety benefits. Pilots are required, by various Federal Aviation Regulations (FAR), to know the destination airport weather and an alternate airport if flying instrument flight rating (IFR). Therefore, pilots use these weather observations for flight planning, takeoffs, and landings. The National Weather Service (NWS) uses these data as input to various weather models to support aviation weather forecasts. Airports use them for airline dispatchers and air traffic control personnel for air traffic control and flow management. The FAA manages the national airspace for the benefit of all users to ensure that air travel is accomplished in a safe, orderly, and efficient manner. Airport surface weather observations provide the primary means of obtaining information on weather conditions at airports within the NAS.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

The ASOS P3I project completed procurement of all 577 Ceilometers. All 577 FAA-funded, production Ceilometers have been accepted by the NWS. As of 01/24/12, 557 of 577 FAA ceilometers have been deployed as part of ASOS P3I.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

The goal is to complete the deployment of the remaining ASOS P3I ceilometers by September 2012. The program will also begin a routine sustainability analysis as part of ongoing operations and maintenance.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology**

**specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2006-09-29

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$0.0	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$373.1	\$6.7	\$2.5	\$0.0
DME (Including Planning) Govt. FTEs:	\$9.1	\$0.3	\$0.3	\$0.0
Sub-Total DME (Including Govt. FTE):	\$382.2	\$7.0	\$2.8	0
O & M Costs:	\$223.7	\$32.5	\$33.3	\$34.7
O & M Govt. FTEs:	\$31.2	\$2.3	\$2.4	\$2.6
Sub-Total O & M Costs (Including Govt. FTE):	\$254.9	\$34.8	\$35.7	\$37.3
Total Cost (Including Govt. FTE):	\$637.1	\$41.8	\$38.5	\$37.3
Total Govt. FTE costs:	\$40.3	\$2.6	\$2.7	\$2.6
# of FTE rep by costs:	641	42	36	37
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

The ASWON program was approved by the FAA Joint Resource Council to remove funding for the Enhanced Precipitation Identification sensors from the program baseline. The program was given an additional \$1.7M in 2011 and another \$1.7M for 2012 during the 2013 Passback, to fund a sustainability analysis for the legacy surface weather systems.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	<a href="#">DTFAWA-03-C-00071</a>									
Awarded	6920	DTFAWA-11-D-00051									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

The effort to complete deployment and installation of the remaining work (Ceilometers) is performed by the National Weather Service (NWS) under an agreement with the FAA. The NWS is required to provide periodic updates on work performance, cost, and schedule. This information is used to perform the monthly FAA EVM analysis. EVM is not required on the above support contract per the FAA's Acquisition Management System (AMS).

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-08-23

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
1	Ceilometer Solution Development and Production	Develop technical solution and produce Ceilometer sensors.			
2	Ceilometer Solution Implementation	Implementation of Ceilometers to all sites.			
3	Sustainability Analysis	Prepare business case for future support for the existing surface weather observation systems.			

**Activity Summary**

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M)	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
1	Ceilometer Solution Development and Production							
2	Ceilometer Solution Implementation							
3	Sustainability Analysis							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
1	Complete Ceilometer Production	Complete Ceilometer Production	2011-09-30	2011-06-22	2011-06-22	182	100	54.95%
2	FY11 Q4 Ceilometer Deployment	Deploy and install 200 Ceilometers for Q4 of FY11	2011-09-30	2011-09-30	2011-09-08	91	22	24.18%
2	Deploy 50% of remaining Ceilometers	Deploy and install 110 Ceilometers	2012-03-31	2012-03-31	2011-10-14	182	169	92.86%
2	Deploy remaining Ceilometers	Deploy and install the last 110 Ceilometers	2012-09-30	2012-09-30	2012-05-18	182	135	74.18%



## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Availability for Automated Surface Observing System (ASOS) observations to customers	percentage	Customer Results - Service Accessibility	Over target	99.000000	99.000000		99.000000	Quarterly
ASOS Mean Time to System Restoration (MTSR) for customer availability	percentage	Customer Results - Service Accessibility	Over target	95.000000	95.000000		95.000000	Quarterly
System availability of Automated Weather Observing System (AWOS)	percentage	Technology - Reliability and Availability	Over target	98.000000	98.000000		98.000000	Monthly
System availability of Automated Weather Sensor System (AWSS)	percentage	Technology - Reliability and Availability	Over target	98.000000	98.000000		98.000000	Semi-Annual
System availability of Stand Alone Weather Sensors (SAWS)	percentage	Technology - Reliability and Availability	Over target	99.000000	99.000000		99.000000	Quarterly